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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,674	03/10/2006	Kai Man Chung	0579-1100	4109
466 YOUNG & TH	7590 03/19/200 OMPSON	EXAMINER		
209 Madison St	treet	BERNSTEIN, DANIEL A		
Suite 500 ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			3743	
			MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/541,674	CHUNG, KAI MAN				
Office Action Summary	Examiner	Art Unit				
	DANIEL A. BERNSTEIN	3743				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
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3) Since this application is in condition for allowan	· —					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>12-23</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>23</u> is/are allowed.						
6)⊠ Claim(s) <u>12-17,19 and 22</u> is/are rejected.	6) Claim(s) <u>12-17,19 and 22</u> is/are rejected.					
7)⊠ Claim(s) <u>18 and 20-21</u> is/are objected to.	7)⊠ Claim(s) <u>18 and 20-21</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner						
10)⊠ The drawing(s) filed on <u>08 July 2005</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) U Other:						

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### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 12, 14-16, 19 and 22 rejected under 35 U.S.C. 102(b) as being anticipated by US 6,478,575 to Sher (Sher).

Sher teaches:

# In Reference to Claim 12

A piezoelectric lighter comprising a flame-generation device (10, Fig.7) which comprises a mechanism for releasing a jet of gas (lever 30) and a piezoelectric mechanism (5) for generating a spark, wherein the lighter comprises two actuators (41 and 71) able to make a pivoting movement under the action of a force (Fig. 7 shows 41 and 71 pivoting about 45) applied by a user at least one of said actuators, referred to as the first actuator (41), being adapted to move independently of the second actuator (the user can apply a force to 41 and it pivots without applying a force to 71) and to act on at least one of said mechanisms (41 acts on 5), referred to as the first mechanism (5), the first actuator (41) being able to make only a pivoting movement (41 makes only a pivoting movement around pivot point 45 when the force is applied to move the actuators from the rest position in Fig. 4 to the active position in Fig. 7) under the action of the force applied by said user between a first resting position (Fig. 4) and second

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active position (Fig. 7), in which said first actuator (41) is adapted to act on at least said first mechanism (5), the second actuator (71) being able to make only a pivoting movement (after 71 is depressed the user applies a force on 41 and pivots 71 from a first position as shown in Fig. 4 to a second position as shown in Fig. 7, during that period, 71 is only able to make a pivoting movement) under the action of the force applied by said user between the first resting position (Fig. 4) and the second active position (Fig. 7) in which said second actuator (71) is adapted to act on the second mechanism (30), the lighter being adapted to generate a flame externally of the lighter when the two actuators have pivoted (Fig. 7 shows the lighter in the ignited position). In Reference to Claim 14

The lighter according to claim 12, wherein the first actuator (41) is adapted to act on one of the mechanisms (5), referred to as the first mechanism, and the second actuator (71) is adapted to act on the second mechanism (30).

#### In Reference to Claim 15

A The lighter according to claim 12, wherein at the same longitudinal end of the lighter, each said first (41) and second (71) actuator comprises a cap (top of actuators 41 and 71) adapted to be subjected to the force applied by said user of the lighter and which is arranged such that the two caps are situated side by side (the side wall of the cap of 71 is situated beside the outer wall of 41, see Fig. 7).

### In Reference to Claim 16

The lighter according to claim 15, wherein the cap of the second actuator (71), referred to as the second cap (cap of 71), comprises at least one portion which

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penetrates into a region of the cap of the first actuator (the cap of 71 is housed inside the cap of 41 and when pushed down before applying said force, penetrates the cap of 41), referred to as the first cap (cap of 41), such that the force applied by said user in that region drives the two caps through a pivoting movement (when the user applies the force, both caps pivot about pivot point 45).

## In Reference to Claim 19

The lighter according to claim 12, wherein one of said first (41) and second actuator (71), when in a resting position (Fig. 4), covers a region of the lighter in which a flame is generated externally of the lighter when both mechanisms are activated (Fig. 4 shows both actuators 41 and 71 in the resting position in which they cover the region the flame is generated at nozzle 10).

#### In Reference to Claim 22

The lighter according to claim 12, wherein the first mechanism is the spark generation mechanism (5 is a piezoelectric device).

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Sher in view of US 6,135,761 to Chen (Chen).

# In Reference to Claim 13

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Sher discloses the lighter according to claim 12, wherein when the second actuator (71) is displaced under the action of the force applied by the user (71 is depressed before the both actuators 41 and 71 are pivoted), the second actuator is adapted to drive the first actuator through a pivoting movement along a given path (the user applies a downward force to 71 then while 71 is depressed a second force is applied to pivot both 41 and 71, furthermore 71 is capable of driving the first actuator 41). Sher does not teach that the first and second actuators being situated one behind the other on that path.

Chen teaches that the two actuators being situated one behind the other on that path (see Fig. 2 of Chen, actuators 21 and 25).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the two actuators of Chen with the lighter arrangement of Sher to achieve the same function as disclosed by the applicant. Furthermore, it is well known in the art to have a lighter cap such as Chen where two actuators functioning as a safety mechanism are arranged side by side or "situated one behind the other". This common arrangement is obvious, because it enables the user to engage the safety mechanism and the lighter valve and piezoelectric ignition with one finger.

5. Claim 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Sher in view of US 6,039,561 to Lei (Lei).

In Reference to claim 17

Sher teaches a lighter according to claim 16, but does not teach a penetrating portion of the second cap (71) having a bearing surface which is not smooth.

Lei teaches the penetrating portion of the second cap (9, Fig. 1) has a bearing surface which is not smooth.

It have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the cap of Sher (71, Fig. 4) with the cap of Lei (9, Fig. 1) so that Sher's cap would have a surface that is not smooth. Furthermore, it is well known to apply a rough surface to a cap of a lighter so that the user can better grip the cap when the user is actuating the lighting mechanism. This would be beneficial to Sher, because the cap 71 would be easily held down in the actuating position as both 41 and 71 are pivoted as in Fig. 5. All of the claimed elements were known in prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

# Allowable Subject Matter

6. Claim 18 and 20-21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

# In Reference to Claim 18

The lighter according to claim 15, wherein the two caps (caps of 41 and 71) have bearing surfaces presented to the user which are arranged at different levels along the

longitudinal direction of the lighter, the bearing surface of the second cap being arranged at a level below than that of the bearing surface of the first cap.

## In Reference to Claim 20

The lighter according to claim 19, wherein the actuator covering the region of the lighter in which a flame is generated is the second actuator.

## In Reference to Claim 21

The lighter according to claim 12, wherein the first actuator (41) is adapted to act on both the mechanisms and to generate a flame, the second actuator, in a resting position, covering a region of the lighter in which the flame is generated, thus preventing the latter from propagating externally of the lighter when the second actuator has not pivoted.

#### 7. Claim 23 allowed.

### In Reference to Claim 23

A piezoelectric lighter comprising: a flame-generation device comprising a first mechanism for releasing a jet of gas, and a piezoelectric mechanism for generating a spark; a first and second actuator, each pivotably movable, at least one of said first and second actuator being adapted to pivotably move independently of the pivoting motion of the other actuator; at least one of said first and second actuator capable of acting on one or both mechanisms; wherein the first and second actuator, the gas release jet mechanism, and the piezoelectric mechanism are interconnected so that the piezoelectric mechanism produces a flame external to the lighter only upon the pivotable motion of both the first and second actuator.

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# Response to Arguments

8. Applicant's arguments with respect to claim 12-22 have been considered but are moot in view of the new ground(s) of rejection. The arguments submitted by the applicant are based on the amended claims which are different from the original claims as examined in the first action. Please refer to the new rejection of the amended claims above.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL A. BERNSTEIN whose telephone number is (571)270-5803. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Rinehart can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DAB

/Kenneth B Rinehart/ Supervisory Patent Examiner, Art Unit 3743